System and Method for Interfacing a Data Link Protocol Engine and a Physical Layer

Abstract of the Disclosure

A system and method is provided for interfacing a protocol component with a physical layer component. Initially, a parameter setting message is sent to the physical layer indicating at least the mode of the processor. If the mode is nonframing, a handshaking tone or pattern detection request message is sent to the physical layer component enabling detection of specific handshaking tones or patterns. Next, a handshaking tone or pattern detection indicate message is received from the physical layer component indicating that a recognized tone or bit pattern has been detected in response to a detection request message. A signal request message is sent from the handshaking component to the physical layer component indicating that a handshaking message is to be transmitted as well as the content of that message. In addition, the signal request message also preferably includes parameters relating to the duration of the signal to be transmitted, such as a maximum and minimum symbol number. If these parameters are infinite the physical layer will continue to transmit the signals forever. A handshaking signal confirmation message is received by the handshaking component from the physical layer component indicating that requested signal has been transmitted for the maximum number of symbols.

Figures

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